



## DELAWARE PUBLIC HEALTH LABORATORY

### What is the DELAWARE PUBLIC HEALTH LABORATORY?

The Delaware Public Health Laboratory (DPHL) is a vital testing and diagnostic arm of Delaware's Division of Public Health. Using laboratory expertise and state-of-the-art technologies, the DPHL provides accurate and timely analytical data, information and consultation to protect and enhance the health of the people of Delaware. The DPHL tests for chemical and biological threats to health and safety and monitors the emergence of drug-resistant bacteria to prevent the spread of infection and save lives. Health care providers depend on the DPHL's test results to inform and treat their patients.

The DPHL was established in April 1899 at the Delaware College campus in Newark (now the University of Delaware).

### Services provided:

- 1.) **Chemical Preparedness** – This laboratory tests clinical samples for toxic chemicals, cyanide, nerve agents and heavy metals at trace levels. This laboratory provides training and guidance to sentinel (hospital) laboratories, as well as agricultural, environmental, academic and industry laboratories.
- 2.) **Environmental Chemistry and Bacteriology** – This laboratory tests drinking water for bacteria and chemicals to ensure that water is safe to drink. Samples from private wells are tested for alkalinity, calcium hardness, nitrate, nitrite, iron, sodium and sulfate. Public drinking water supplies are tested for inorganic and organic chemicals and trace metals. This lab also tests preschool children's blood for lead as part of the Childhood Lead Poisoning Prevention Program.
- 3.) **Microbiology** – This laboratory identifies sexually transmitted diseases such as syphilis, gonorrhea and Chlamydia in blood, urine and other fluid samples. This lab also tests for Tuberculosis (TB) and bacteria such as *Salmonella*, *Shigella*, and *E. coli* which are associated with foodborne illnesses. An increasingly important role of this laboratory is detecting drug-resistant bacteria to identify the development of newly resistant strains. The Microbiology Lab identifies gastrointestinal parasites. It can test environmental and clinical samples for agents of bioterrorism, such as *Bacillus anthracis*, *Yersinia pestis* (plague) and *Francisella tularensis*.



- 4.) Newborn Screening** – This laboratory tests for genetic and metabolic diseases in every Delaware newborn to prevent mental retardation, serious illness, and even death. Babies born in Delaware receive a heel stick, through which a blood sample is obtained on a special filter paper card. The blood is analyzed for 37 different genetic and metabolic disorders including: cystic fibrosis, congenital hypothyroidism, sickle cell disease and other major hemoglobinopathies, congenital adrenal hyperplasia, galactosemia, and amino acid disorders (e.g. phenylketonuria (PKU)) and maple syrup urine disease.
- 5.) Virology and Molecular** – This laboratory identifies viruses and viral infections by testing samples from blood, urine and other body fluids. The Lab tests for HIV-1, herpes, hepatitis, West Nile and other arboviruses, rabies, influenza and Norovirus.

**Can the public deliver samples?**

No, the public should not deliver samples to the DPHL. Patient samples are collected at the direction of health care providers, or epidemiologists investigating disease outbreaks. Each day, DPHL's courier system transports specimens from numerous health care provider sites throughout the state.

**Is the Delaware Public Health Laboratory certified?**

Yes, the Delaware Public Health Laboratory is certified by the Centers for Medicaid and Medicare Services (CMS) under CLIA; the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA). DPHL is also a reference laboratory in the Centers for Disease Control and Prevention's (CDC) Laboratory Response Network.

**Where is it located?**

The Delaware Public Health Laboratory is located at 30 Sunnyside Rd., Smyrna, Delaware 19977. It is on the campus of the Delaware Hospital for the Chronically Ill, on the corner of Route 13.

**For more information:**

Call the Delaware Public Health Laboratory at (302) 223-1520. Routine operating hours are 8 a.m. to 4:30 p.m. weekdays.

Fax (302) 653-2877